REMARKS

Claims 1-4 and 7-22 will be pending in the application. Reconsideration of the rejected claims in view of the following remarks is respectfully requested.

35 U.S.C. §103 Rejection

Claims 1-4 and 7-12 were rejected under 35 U.S.C. §103(a) for being unpatentable over U.S. Patent No. 7,133,365 issued to Klinker, *et al.* ("Klinker"). This rejection is respectfully traversed.

Applicant submits that the reference applied by the Examiner does not show or suggest each and every feature of the claimed invention for the reasons already made of record, and for the additional reasons set forth below.

Claims 1, 9, and 10

Claim 1 recites, in pertinent part:
> … determining whether or not transmission of said datagram on a link to said next hop router would result in a bandwidth usage exceeding a bandwidth threshold associated with said next hop router…and
> basing a routing decision on the bandwidth usage of the link to said next hop router,
> wherein the bandwidth usage is a dynamic parameter which is updated in a forwarding information database (FIB) in real-time.

Claim 9 recites, in pertinent part:
> … means for determining whether or not transmission of said datagram on a link to said next hop router would result in a bandwidth usage exceeding a bandwidth threshold associated with said next hop router…
> wherein the router bases a routing decision on the bandwidth usage of the link to said next hop router, and
> wherein the bandwidth usage is a dynamic parameter which is updated in a forwarding information database (FIB) in real-time.

Claim 10 recites, in pertinent part:

> … third program instructions to determine whether or not transmission of said datagram on a link to said next hop router would result in a bandwidth usage exceeding a bandwidth threshold associated with said next hop router…
>
> wherein a routing decision is based on the bandwidth usage of the link to said next hop router, and
>
> wherein the bandwidth usage is a dynamic parameter which is updated in a forwarding information database (FIB) in real-time.

The Examiner asserts that Klinker includes the feature of determining whether or not transmission of a datagram on a link to the next hop router would result in a bandwidth usage exceeding a bandwidth threshold associated with the next hop router.

Applicant disagrees. Klinker appears to determine whether a data traffic flow meets one or more rules associated with a flow policy. (Col. 7, line 65 – Col. 8, line 5.) The rules define acceptable routing behavior associated with a traffic flow, for example, by defining the maximum bandwidth usage associated with a specific provider, the range of acceptable service providers, etc. (Col. 8, lines 7-21.) However, this is not the same as determining whether or not transmission of said datagram on a link to said next hop router would result in a bandwidth usage exceeding a bandwidth threshold associated with said next hop router.

The flow control system of Klinker includes a usage collector, which is configured to monitor usage characteristics such as the load and available capacity of each network service provider (NSP). (Col. 10, lines 18-28.) The usage collector is comprised of a raw collector, utilization monitor, and bill reconstructor. (Fig. 12.) The raw collector sends a query to collect interface raw byte counters from routers on each of the provider circuits at a specified sampling interval. (Col. 20, lines 33-36.) This raw

byte information is sent to the utilization monitor, which calculates the ingress and egress circuit utilization for each provider and determines whether bandwidth is increasing or decreasing in size for a given service provider. (Col. 20, lines 42-51.) The bill reconstructor then uses the raw byte counters and the provider's billable rates for the current billing period to generate an estimated bill, which is sent to a controller for use in peak avoidance and least cost routing. (Col. 20, lines 52-66.) In addition to using the estimated bill for peak avoidance and least cost routing, the controller may also use the billing information to determine whether a route has free bandwidth, i.e., the route does not incur additional cost to use. (Col. 21, lines 6-10.) If a route has no free bandwidth and/or exceeds a flow policy, then traffic flow may be changed to a better performing path. (Col. 8, line 63 – Col. 9, line 4; Col. 26, lines 53-60.)

Clearly, the above-noted says nothing with regard to a routing decision being based on the bandwidth usage <u>of the link to said next hop router</u>. Again, even assuming that Klinker makes a routing determination, Klinker does so <u>for a given service provider</u> and not one that is based on the bandwidth usage <u>of the link to said next hop router</u>.

Klinker also has not been shown to disclose or suggest, that the bandwidth usage <u>is a dynamic parameter which is updated in a forwarding information database (FIB) in real-time</u>. Although the Examiner identifies the devices 205, 211 and 220 as somehow teaching this feature (see paragraph bridging pages 3 and 4 of the instant Office Action), it has not escaped Applicant's notice that the Examiner has failed even to identify the recited FIB. Nor has the Examiner explained how the devices 205, 211 and

222 function so that the bandwidth usage <u>is a dynamic parameter which is updated in a forwarding information database (FIB) in real-time</u>.

Applicant reminds the Examiner that when the Examiner equates certain devices in a prior art reference to devices recited in the claims, the Examiner is required to explain why the disclosed device "equates to" the recited device "as known to one of ordinary skill in the art." See pages 6-8 of the attached Decision *Ex parte PRAMANICK*. Applicant also reminds the Examiner that the Examiner is required to at least explain how the disclosed device is capable of functioning in the recited manner. See last sentence of page 6 of *Ex parte PRAMANICK*.

Applicant also reminds the Examiner that, to the extent that the Examiner believes that certain devices in Klinker are capable of functioning in the manner recited in the above-noted claims, Applicant notes that the Examiner has failed to identify the disclosed "structure which is capable of performing the recited functional limitations" (see pages 4 and 5 of non-precedential decision *Ex parte ZDEPSKI*). Certainly, the Examiner identified devices of Klinker have not been shown by the Examiner or by the actual disclosure of Klinker to be capable of functioning in a manner as recited in the above-noted claims or as nakedly asserted by the Examiner. At the very least, the Examiner is required to address the operation of the disclosed "hardware elements with respect to the recited claim limitations." See page 6 of non-precedential decision *Ex parte YOSHIDA*. In particular, the Examiner should explain how the devices 205, 211 and 222 can be interpreted to operate so that the bandwidth usage <u>is a dynamic parameter which is updated in a forwarding information database (FIB) in real-time</u>.

Moreover, Applicant submits that the Examiner has merely identified broad passages of Klinker without providing "any citation specifically addressing" each claim limitation and that this is entirely improper. See page 8 of non-precedential decision *Ex parte HUA*. For example, although the Examiner has identified Fig. 12 and certain passages from columns 20 and 21 as teaching the determining, the Examiner has not explained how the disclosed passages teaches each recited feature. Applicant notes, in particular, that the language on col. 21, lines 5-10 state the following:

> That is, controller 1202 uses data from billing message 1261, including billing rates, to determine an alternate route based in part on a route's free bandwidth (i.e., route does not incur additional cost to use), in accordance with the flow policy.

It has not been explained by the Examiner how the above-noted language relates, much less, teaches the following recited feature "if so, selecting among other possible next hop routers en route to or associated with said destination address, another next hop router for which transmission of said datagram on a link to said other next hop router would not result in a bandwidth usage exceeding a bandwidth threshold associated with said other next hop router, updating the bandwidth usage associated with said other next hop router, and transmitting said datagram to said other next hop router. At the very least, the Examiner should explain how "determining an alternate route" is the same as <u>selecting</u> among other possible next hop routers en route to or associated with said destination address, another next hop router for which transmission of said datagram on a link to said other next hop router would not result in a bandwidth usage exceeding a bandwidth threshold associated with said other next

hop router, <u>updating</u> the bandwidth usage associated with said other next hop router,

and <u>transmitting</u> said datagram to said other next hop router.

Additionally, to the extent that the Examiner is basing the instant rejection on an

argument of inherency consistent with MPEP 2112, Applicant notes that MPEP 2112

specifically states, in part:

> "In relying upon the theory of inherency, the examiner must provide a basis in
> fact and/or technical reasoning to reasonably support the determination that the
> allegedly inherent characteristic <u>necessarily</u> flows from the teachings of the
> applied prior art." *Ex parte Levy,* 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter.
> 1990) (emphasis in original) (Applicant's invention was directed to a biaxially
> oriented, flexible dilation catheter balloon (a tube which expands upon inflation)
> used, for example, in clearing the blood vessels of heart patients). The examiner
> applied a U.S. patent to Schjeldahl which disclosed injection molding a tubular
> preform and then injecting air into the preform to expand it against a mold (blow
> molding). The reference did not directly state that the end product balloon was
> <u>biaxially oriented</u>. It did disclose that the balloon was "formed from a thin flexible
> inelastic, high tensile strength, biaxially oriented synthetic plastic material." *Id.* at
> 1462 (emphasis in original). The examiner argued that Schjeldahl's balloon was
> inherently biaxially oriented. The Board reversed on the basis that the examiner
> did not provide objective evidence or cogent technical reasoning to support the
> conclusion of inherency.).

The Examiner has neither stated that the rejection is based on inherency, nor

provided any <u>basis in fact and/or technical reasoning to reasonably support the</u>

<u>determination that the allegedly inherent characteristic necessarily flows from the</u>

<u>teachings of the applied prior art</u>.

For the foregoing reasons and because this document fails to disclose the

above-noted features of the instant invention, Applicant submits that this document fails

to disclose each and every recited feature of claims 1, 9 and 10. Accordingly, Applicant

submits that the Examiner has failed to provide an adequate evidentiary basis to

support a rejection of anticipation or obviousness, and that the instant rejection is improper.

Accordingly, Applicant respectfully requests that the rejection over claims 1, 9, and 10 be withdrawn.

Dependent Claims

Claims 2-4, 7-8, and 11-22 are dependent claims, depending on independent claims 1, 9, and 10. For this reason, Applicant submits that these claims are thus distinguishable based on independent claims 1, 9, and 10. Applicant further submits that these claims also include subject matter which is distinguishable from Klinker.

Claim 2

Claim 2 recites, in pertinent part:

> ...updating the bandwidth threshold associated with said other, chosen next hop router with a larger, predefined bandwidth threshold...

Applicant submits that Klinker does not update a bandwidth threshold associated with the chosen next hop router with a larger predefined bandwidth threshold. Klinker determines whether a route has free bandwidth before using the route. If the route does not have free bandwidth then an alternative route is determined based in part on a route's free bandwidth and the cost associated with the routing. (Col. 21, lines 1-10.) In other words, if a specific route between NSPs is not available then Klinker will keep looking for another low cost route that meets existing flow policies. Klinker does not update the bandwidth threshold associated with the next hop router with a larger

predefined bandwidth threshold. Accordingly, Applicant respectfully submits that claim

2 is not unpatentable.

Claim 3

> Claim 3 recites, in pertinent part:
>
>> ... adding a bandwidth usage associated with said next hop router
>> immediately before transmission of said datagram on said link to said next
>> hop router to a bandwidth usage required for transmission of said
>> datagram on said link to said next hop router...

The Examiner asserts that Klinker adds bandwidth usage, associated with the

next hop router immediately before transmitting the datagram on a link to the next hop

router, to the bandwidth usage required for transmitting the datagram on the link to the

next hop router. However, Applicant respectfully submits that the passage cited by the

Examiner does not include this feature. More specifically, the passage merely lists

details of what may be included in the NSP configuration information. (Col. 20, lines 21-

31.) This configuration information includes data representing utilization trends for use

with short range forecasting models, e.g., to determine whether bandwidth is trending

up or down. (Col. 20, lines 46-51.) However, Klinker does not include adding bandwidth

usage associated with the next hop router immediately before transmitting the datagram

on a link to the next hop router. Accordingly, Applicant respectfully submits that claim 2

is not anticipated. Accordingly, claim 3 is not unpatentable.

Claim 4

> Claim 4 recites, in pertinent part:

> … wherein the step of updating the bandwidth usage associated with the first said next hop router, comprises the step of updating in a table, the current bandwidth usage with the estimated bandwidth usage.

The Examiner asserts that Klinker updates in a table the current bandwidth usage with the estimated bandwidth usage. However, Applicant asserts that the passage cited by the Examiner does not include any indication that a table is used, much less updated. (Col. 20, lines 13-20.) Furthermore, while Klinker includes a routing table, that table is used to update routes, or paths, that meet minimum service levels (e.g., no violations of SLA, or no unacceptable deviations from agreed upon performance metrics as defined by the associated flow policy). (Col. 21, lines 25-29.) The routing table is not used to update current bandwidth usage with the estimated bandwidth usage. Accordingly, claim 4 is not unpatentable.
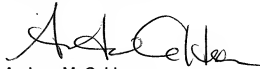
Finally, Applicant disagrees that claims 17-19 recite the same features as claims 13, 15 and 16. This is clearly not the case. For example, because claim 17 recites means language, it must be interpreted with specific reference to the means disclosed in the specification (or its equivalents). See page 15 of non-precedential decision *Ex parte IGNATIEV*.

CONCLUSION

In view of the foregoing remarks, Applicant submits that all of the claims are patentably distinct from the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue. The

Examiner is invited to contact the undersigned at the telephone number listed below, if

needed. Applicant hereby makes a written conditional petition for extension of time, if

required. Please charge any deficiencies in fees and credit any overpayment of fees to

Attorney's Deposit Account No. 09-0457.

Respectfully submitted,

Andrew M. Calderon
Registration No. 38,093

September 19, 2008
Greenblum & Bernstein, P.L.C.
1950 Roland Clarke Place
Reston, Virginia 20191
Telephone: 703-716-1191
Facsimile: 703-716-1180